

REMARKS/ARGUMENTS

Applicants thank the Examiner for notice of allowable claims 31-32, as noted at page 5 of the Office Action mailed June 2, 2003. Applicant's counsel also thanks the Examiner for discussing the application via telephone on September 26, 2003. Although no agreement was reached, Applicant's counsel gained a greater appreciation of the Examiner's position.

Rejections under 35 U.S.C. 103(a)

In the Office Action, mailed June 2, 2003, claims 1-3, 5-6, 8, 11-12, 16-17, 19-21, 23-24 and 30 were rejected under 35 U.S.C. 103(a) as being unpatentable over Brucker et al., U.S. Patent No. 5,462,521. This rejection is respectfully traversed.

As recognized in the Office Action, Brucker "fails to show the tip being grooveless." Indeed, the Figure 9 embodiment of Brucker, relied upon in the Office Action, shows a tip structure with an exterior surface 50 having annular grooves 58. In the Figure 9 embodiment, channels 60 extend between path means 54 and annular grooves 58. Thus, the Figure 9 embodiment of Brucker has a different structure than claim 1 of the present invention. It is respectfully submitted that independent claims 1 and 30, as previously presented, are not obvious by the structure shown in Figure 9 of Brucker, nor would it have been obvious prior to the present invention to modify the structure of Fig. 9 of Brucker to incorporate the grooveless outer surface of the tips of Figures 6, 7 or 10 of Brucker. The Figure 9 embodiment provides a wholly different and separate structure than the Figure 6, 7 and 10 embodiments.

While Brucker shows other embodiments that have grooveless surfaces (Figures 6, 7, and 10), those other embodiments are alternative and separate embodiments from the embodiment of Figure 9 of Brucker. The Figure 6 embodiment has a structure 26 having a multiplicity of specifically formed apertures or path means 52. In the Figure 6 embodiment, there is no path means 54, and there are no channels 60 that extend between a path means 54 to the exterior surface 50. In the Figure 6 embodiment, it is the position of apertures 52 which are designed to provide a continuous layer of fluid over the exterior surface 50. *See* Brucker at Col. 5, lines 54-62.

On the other hand, in the Figure 9 embodiment, it is the channels 56 and 58 which are designed to provide a continuous, evenly distributed fluid protective layer over substantially the entire exterior surface 50. *See* Brucker at Col. 6, lines 23-27.

In the Figure 7 embodiment, the tip structure is made of a solid metal material or a dense ceramic material having a single path means 54 out of the end of the tip structure.

In the Figure 10 embodiment, the tip structure is made ceramic insulating material that includes randomly formed path means 61.

There is no suggestion in Brucker to eliminate the annular grooves from the embodiment shown in Figure 9 of Brucker. Indeed, Brucker expressly states that the grooves 58 in the embodiment of Figure 9 “are designed to communicate with path means 54 to provide a continuous, evenly distributed fluid protective layer over substantially the entire exterior surface 50 of metallic tip structure 26.” Brucker at Col. 6, lines 23-27. Thus, Brucker expressly teaches away from eliminating the annular grooves 58 from the embodiment shown in Figure 9.

Brucker's express teaching away from eliminating the annular grooves 58 from the embodiment shown in Figure 9 (Col. 6, lines 23-27) refutes the view that it would have been obvious to incorporate a grooveless outer surface of the tips from alternative and separate embodiments shown in Figures 6, 7 and 10 of Brucker. Simply put, Brucker expressly teaches away from eliminating annular grooves from the embodiment of Figure 9, and does not provide motivation for making this substantial change to the embodiment shown in Figure 9 of Brucker.

Because of Brucker's express teaching away from eliminating the annular grooves 58 from the embodiment shown in Figure 9 (Col. 6, lines 23-27), the claimed invention of claims 1-3, 5-6, 8, 11-12, 16-17, 19-21, 23-24 and 30 are patentable over Brucker.

In the Office Action, claims 4, 7, 9-10, 12-15, 18, 25-27 and 29 were rejected under 35 U.S.C. 103(a) as being unpatentable over Brucker et al. This rejection is respectfully traversed. For the same reasons that claims 1-3, 5-6, 8, 11-12, 16-17, 19-21, 23-24 and 30 are patentable as discussed above, so are claims 4, 7, 9-10, 12-15, 18, 25-27 and 29. Claims 4, 7, 9-10, 12-15, and 18 are dependent on claim 1. Independent claim 25 contains the step of forming a drug delivery segment with "the outside surface being substantially annularly grooveless." Claims 26-27 and 29 depend from claim 25, and are thus also patentable.

In the Office Action, claims 22 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Brucker in view of Lindsay et al., U.S. Patent No. 4,863,441. For the same reasons that independent claims 1 and 25 are patentable over Brucker, *supra*, dependent claims 22 and 28 are also patentable. A modifying of tubes in Figure 9 in Brucker so that the tubes are tapered, even if proper, would still result in a drug delivery segment having an outside surface with annular grooves 58.

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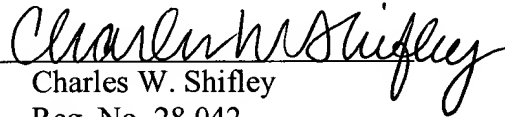
New independent method claims 33-36 claim methods similar to previously allowed claims 31 and 32. New dependent method claims 37-42 depend from corresponding independent claims 31-36, respectively.

Conclusion

In view of the foregoing, Applicant respectfully requests that a timely Notice of Allowance be issued for pending claims 1-42. The Examiner is invited to contact the undersigned should it be deemed necessary to facilitate prosecution of the application.

Respectfully submitted,
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